In the author's opinion "asthma is," therefore, "only one link in a chain of quasi-independent affections, which commences with inflammatory changes of the pulmonary tissue, and terminates with emphysema or bronchiectasis." These changes in the lungs are necessarily accompanied by destruction of the pulmonary vessels, and secondarily, in consequence of the greater amount of work which the heart is now called upon to perform, in order to force a relatively larger quantity of blood through the contracted lungs, to hypertrophy of that organ. "Under the influence of this increased pressure," the author says, "the pulmonary vessels, unprovided, as they are, with a vascular tonus, readily dilate, and, in order to compensate for the loss of the capillaries, extensive anastomoses form between the pulmonary artery, on the one hand, and the bronchial and pulmonary veins on the other, by means of vascular arches, remarkable on account of their great length, their equable diameter, and their want of branches. The surface of the bronchial mucous membrane then appears studded with granular or villous elevations. On microscopic examination these are found to be vascular papillæ, pyramidal, or club-shaped, consisting of a tortuous vessel, elevated over the surface, and surrounded with connective tissue." If we understand the author correctly, it is the liability of the lung in this condition to become congested, which gives rise to the asthmatic paroxysms. It is difficult, however, to comprehend how this affection of the lung can apparently coexist in the intervals of the paroxysms with perfect health. Take, for instance, the cases, rare indeed, but which nevertheless do occur, in which the patient only suffers from asthma after exposure to the powder of ipecacuanha, while at other times he seems to be entirely free from disease. It seems to us utterly impossible to conceive the existence in these cases of such grave lesions of the lungs.

Entertaining these views of the pathology of asthma, it is not surprising that the author explains the action of certain remedies rather differently from other observers. Ipecacuanha, tartar emetic, and lobelia, in large and nauseating doses, owe their efficacy, he believes, to their power of reducing arterial pressure, and thus of increasing serous exudation; and he explains in the same way the relief which follows the smoking of tobacco and stramonium.

The author seems to us too anxious to establish a theory of the nature of asthma different from that which is generally accepted by pathologists, and which has found favour with such distinguished physicians as Sir Thomas Watson, Hyde Salter, and Bristowe. He does not always, we think, draw the distinction between dyspnœa and asthma quite as sharply as he ought, for we find him alluding to cases of embolism of the pulmonary artery and of plastic bronchitis as if there were danger at the present time of attributing the dyspnœa which arises from these conditions to spasmodic contraction of the bronchial tubes.

J. H. H.

ART. XLVII.—*A Practical Treatise on Diseases of the Ear, including the Anatomy of the Organ.* By D. B. ST. JOHN ROOSA, M.D., Prof. of Diseases of the Eye and Ear in University of City of New York, etc. Fourth edition. New York: Wm. Wood & Co., 1878.

WHEN the first edition of Dr. Roosa's book was noticed in this Journal in January, 1874, it was predicted that it would at once take its place as a standard authority. That it has done so and that it still maintains this position is fully shown by the present demand for a fourth edition.

The corrections that the author thought necessary, and the additions required by the progress of otology have been made in the previous editions. "In this edition the chapter upon Diseases of the Internal Ear has been entirely rewritten, and many additions have been made in the discussion of this subject. The remainder of the work remains as in the last impression." The present notice will, therefore, be confined to a few points in this chapter.

Dr. Roosa is inclined to adopt the view of Voltolini, that in many cases that pass for cerebro-spinal meningitis, the seat of the disease is really in the labyrinth. All aural surgeons meet with cases of "nervous deafness," usually in children, which are attributed by parents and family physicians to attacks of cerebro-spinal meningitis, and the question has been raised by Voltolini whether in some at least of these cases the labyrinthic affection is merely a complication of the meningitis, or is itself the primary disease. This is an interesting point in pathology which physicians and aurists must combine to determine, as the specialist usually sees only the result of the disease. There is great need of post-mortem reports of carefully observed cases.

There is an interesting discussion of deafness to certain tones only, double hearing, vertigo, and tinnitus, considered as symptoms of diseases of the internal ear, and of the use of electricity in the diagnosis and treatment of disease of the auditory nerve. The author has not been able to convince himself that electricity is of any great value in the diagnosis and treatment of nervous deafness, and has finally abandoned its use. Most practical surgeons will probably agree with him in this decision as to the present status of this agent, whatever the future may bring forth. It has not even been decided if the acoustic phenomena produced by the galvanic current are due to direct irritation of the auditory nerve, to reflex irritation through the medium of the trigeminus, or to contraction of the small muscles of the ear, and until the whole subject has been brought to a more definite scientific basis than has yet been reached, we are perhaps scarcely in a better position to decide upon it positively and finally than was the old lady, who felt certain that electricity could not be of any use in deafness, because she had been struck by lightning and nearly killed, but it hadn't done her hearing any good.

In regard to the therapeutics of nervous deafness not very much, it must be confessed, is to be said, and the most that can be expected of an author in dealing with it is honesty, for which the reader may give Dr. Roosa full credit. He gives some striking instances of the efficacy of treatment in syphilitic subjects, but admits that all other cases of chronic nervous deafness are utterly hopeless. We believe, however, that no one can read this interesting chapter without feeling that in pathology, at least, the internal ear is not quite the *terra incognita* that it used to be, and that some advances have also been made towards greater certainty in diagnosis. G. C. H.

ART. XLVIII.—*Annual Reports of the Supervising Surgeon-General of the Marine Hospital Service of the United States.* For the fiscal years 1876 and 1877. 8vo. pp. 213. Washington, 1878.

FROM this *résumé* of the work performed by this most estimable service we learn that more than fifteen thousand seamen have been relieved during the year ending June 30, 1877, and a somewhat larger number the previous twelve-month. Dr. Woodworth states that no report for 1876 was printed; and therefore includes some of the matter and statistics which should properly have appeared a year ago.

The average cost of the relief afforded, per head, has been pretty steadily